REQUEST FOR PROPOSAL
Addendum # 2

King County
Department Of Executive Services
Finance and Business Operations Division
Procurement and Contract Services Section
206-684-1681 TTY RELAY: 711

ADDENDUM DATE: August 2, 2004

RFP Title: **On-Board Systems / Communication Center System**

RFP Number: **04-001PR**

Revised Due Date/Time: **October 14, 2004- 2:00 P.M.**

Buyer: Paul Russell, *paul.russell@metrokc.gov* , 206-684-1054

Q#	SUBSECTION	QUESTION	ANSWER
Part A, SECTION 1, Proposal Preparation			
1.	Subsection 1.B. Proposal Submission	Requests for extension of time to submit Proposals.	**DELETE**: end of first sentence Proposals shall contain all required attachments and information, and shall be sealed and submitted to King County, Procurement and Contract Services Section, Mail Stop EXC-ES-0871, Eighth Floor, Exchange Building, 821 Second Avenue, Seattle, Washington 98104-1598 no later than 2:00 p.m. Seattle time on ~~August 19, 2004~~. **REPLACE WITH:** Proposals shall contain all required attachments and information, and shall be sealed and submitted to King County, Procurement and Contract Services Section, Mail Stop EXC-ES-0871, Eighth Floor, Exchange Building, 821 Second Avenue, Seattle, Washington 98104-1598 no later than 2:00 p.m. Seattle time on **October 14, 2004**.
2.	Subsection 1.E. Questions and Interpretation of Proposal		**DELETE:** end of first paragraph, second sentence Questions, request for interpretation or clarification, or petition for changes, additions or deletions to technical or contractual terms in the RFP shall be submitted via email to Paul Russell at *paul.russell@metrokc.gov* at least ~~10~~ Days before the date established for submitting proposals. **REPLACE WITH:** Questions, request for interpretation or clarification, or petition for changes, additions or deletions to technical or contractual terms in the RFP shall be submitted via email to Paul Russell at *paul.russell@metrokc.gov* at least **15** Days before the date established for submitting proposals.

Q#	SUBSECTION	QUESTION	ANSWER
3.	Subsection 1.F. Schedule		**DELETE:** ~~08/09/2004~~ Last questions due, in writing Subsection 1.E ~~08/19/2004~~ Proposals due Subsection 1.B ~~08/23/2004~~ Evaluation/Negotiation of proposals begins. Subsection 2 **REPLACE WITH:** **09/30/2004** Last questions due, in writing Subsection 1.E **10/14/2004** Proposals due Subsection 1.B **10/18/2004** Evaluation/Negotiation of proposals begins. Subsection 2
4.	Subsection 1.T .2. Organization of Submission		**ADD:** to the second paragraph The proposal information shall be in Microsoft Office 95, **or later version,** Word and Excel formats.
5.	Subsection 1.T .3, Volume 1, TAB A. References and Proposer Information		**DELETE:** a portion of the first paragraph Provide four recent references ~~from projects~~ of similar transit technology performed by the Proposer. **REPLACE WITH:** Provide four recent references**, each from a different recent project,** of similar transit technology performed by the Proposer.
6.	Subsection 1.T .3, Volume 5, TAB B. Responsiveness and Responsibility.		**DELETE:** a portion of the paragraph Insert response to Responsiveness and Responsibility Section B-2, i.e. Financial Statements. **REPLACE WITH:** Insert response to Section 2.C, Evaluation of Responsiveness and Responsibility, i.e. Financial Statements.
7.	Subsection 1.T .3, Volume 5, TAB D. Statement on Insurance		**DELETE:** a portion of the paragraph Provide a statement that upon ~~n~~otice of ~~i~~ntent to Award your firm will provide the County Insurance coverage per instructions in Part B, Section ~~68~~. **REPLACE WITH:** Provide a statement that upon **N**otice of **I**ntent to Award your firm will provide the County Insurance coverage per instructions in Part B, Section **71**.

Part A, SECTION 2, Proposal Evaluation and Contract Award			
8.	Subsection 2.C 2. Responsibility		**DELETE:** a portion of the first paragraph The County shall consider all material submitted by the Proposer and other evidence it may obtain otherwise to determine whether the Proposer is capable of and has a history of successfully completing contracts of this type. This ~~may~~ include requiring the Proposer to provide references from customers who have been provided the same or equivalent goods or services. **REPLACE WITH:** The County shall consider all material submitted by the Proposer and other evidence it may obtain otherwise to determine whether the Proposer is capable of and has a history of successfully completing contracts of this type. This include**s** requiring the Proposer to provide references from customers who have been provided the same or equivalent goods or services.
9.	Subsection 2.E. 1.1.3.		**ADD:** within subsection The Proposer must be determined to be responsive, responsible, and financially viable, as defined in preceding Subsection 2.C, **Evaluation of** Responsiveness and Responsibility.
10.	Subsection 2.E. 1.2.1.		**ADD:** to end of subsection Certify that open, published Interface Control Documents (ICD) will be provided for every subsystem interface, as defined in Appendix M, Glossary **and as specified in Appendix C, Interface Control Document**.
11.	Subsection 2.E. 2.2. Evaluation of Price	KCM mentioned three (priced) options as future technology. Are those going to be evaluated as part of the base scoring?	Note: this answer is different than the verbal answer given during the Pre-proposal Conference on June 30, 2004. **ADD:** to end of first paragraph The three Priced Options, described in Part C, Subsection 2.A.4.1. Priced Options, will be evaluated in Phase II (and in Phase IV if used). The Options will be given both a Technical Score and Price Score.
Part A, Attachment Q, Proposers Self Assessment Matrix			
12.	Subsection 1. Self Assessment Rating Scheme		**DELETE:** portion of second paragraph 1. Self Assessment Rating Scheme Each Proposer shall complete the self-assessment matrix by assigning design maturity and compatibility ratings to each functional requirement provided below in the ~~Appendix~~ Q, Table Q.2, OBS/CCS FUNCTIONAL REQUIREMENTS MATRIX. **REPLACE WITH:** 1. Self Assessment Rating Scheme Each Proposer shall complete the self-assessment matrix by assigning design maturity and compatibility ratings to each functional requirement provided below in the

			Attachment Q, Table Q.2, OBS/CCS FUNCTIONAL REQUIREMENTS MATRIX.
Part B, Contract Terms and Conditions			
13.	Section B.16. Contract Claims	Is there a contractual procedure for a contractor to be compensated for additional project expenses and for the release of the 15% holdback and letter of credit if other "Interdependent Projects" are delayed causing delay in Full System Acceptance of the OBS/CCS Project?	**CLARIFICATION:** The RFP, Part B, Section 16, "Contract Claims" allows the Contractor under certain circumstances to submit a claim for additional time or compensation. Please refer to Part B, Section 16.1 which sets forth the circumstances under which the Contractor may submit a Contract Claim.
Part C, SECTION 1 Table of Contents			
14.	Page xiv		**ADD:** to end of Part C, Table of Contents Appendix A ….. TCIP Data Dictionary Appendix B ….. Transit Bases Information Appendix C ….. Interface Control Documents Appendix D ….. DVRS Interface Appendix E ..... TSP Tag Data Sheet Appendix F ….. Current Reporting Requirements Appendix G ..... Event Log Matrix Appendix H ..... DDU Functionality Matrices Appendix I ..... Legacy CAD/AVL Sample Appendix J ..... Current CAD/AVL Technical Environment Appendix K ..... OBS and CCS Administrator Toolkits Appendix L ..... 4.9 GHz Federal Register Notice Appendix M ..... Glossary of Terms and Acronyms
Part C, SECTION 1 OBS/CCS Business Requirements			
15.	Subsection 1.A. 5. Assumptions e.	KCM has requested source code. Could you explain how you plan to use the source code and how we (proposers) can expect maintenance to work ?	**CLARIFICATION:** for Paragraph e. Source Code is included in the definition of Software Documentation and thereby included in the definition of IP Materials (Part B, Exhibit 1). The following is intended as a guide but is not intended to amend or modify the actual language in Part B and Proposers should rely only on language in RFP. Part B, Sections 41.4 and 41.5 require that the County be provided with all IP Materials (including source code) for the OBS IP and CCS IP (see definitions of those terms). For Contractor IP related to OBS and CCS, Part B, Section 41.3 requires escrow of all IP Materials. In addition, certain IP Materials must be provided to the County. Section 41.3.3 requires provision to the County of IP Materials "sufficient to enable the County and its employees to

<table>
<tr><td></td><td></td><td></td><td>perform hardware maintenance, including component level maintenance . . .." To the extent source code is required for hardware maintenance, it must be provided to the County.

Provision of source code at a level necessary for software maintenance, however, is not required because the Contractor is responsible for performing software maintenance. (Part B, Sections 32 and 33). We do not envision both Contractor and County personnel maintaining the software at the same time.</td></tr>
<tr><td>16.</td><td>Subsection 1.B. 4.7.2 Description of Work</td><td>Is there a covert microphone (on the revenue vehicles)?</td><td>CLARIFICATION:
On the portion of the fleet that has the DVRS implemented, a covert microphone is provided as part of that installation.

ADD: new key function to list

h. A security microphone is installed in the driver cockpit as a part of the DVRS installation. See Part C, Subsection 2.A.1.5.1.1. Revenue Vehicle (RV) Domain.</td></tr>
<tr><td>17.</td><td>Subsection 1.B. 4.8.1.2, Table 1.B.4.8.1.2. Current Installation of Wireless Access Points</td><td></td><td>DELETE: portions of Part C, Table 1.B.4.8.1.2
<table>
<tr><th>Base</th><th>Number of Access Points—Cisco Model #</th></tr>
<tr><td>Atlantic</td><td>~~1—350~~</td></tr>
<tr><td>Bellevue</td><td>~~2—350~~</td></tr>
<tr><td>Central</td><td>~~1—350~~</td></tr>
<tr><td>Central, at camera shop</td><td>~~1—1200~~</td></tr>
<tr><td>East</td><td>~~2—350~~</td></tr>
<tr><td>North</td><td>~~6—350~~</td></tr>
<tr><td>Ryerson</td><td>~~2—350~~</td></tr>
<tr><td>South</td><td>~~1—350~~</td></tr>
<tr><td>South Training</td><td>0</td></tr>
</table>
REPLACE WITH:
<table>
<tr><th>Base</th><th>Number of Access Points—Cisco Model #</th></tr>
<tr><td>Atlantic</td><td>2—1200</td></tr>
<tr><td>Bellevue</td><td>4—1200</td></tr>
<tr><td>Central</td><td>2—1200</td></tr>
<tr><td>Central, at camera shop</td><td>1—1200</td></tr>
<tr><td>East</td><td>4—1200</td></tr>
<tr><td>North</td><td>12—1200</td></tr>
<tr><td>Ryerson</td><td>4—1200</td></tr>
<tr><td>South</td><td>2—-1200</td></tr>
<tr><td>South Training</td><td>0</td></tr>
</table></td></tr>
</table>

18.	Subsection 1.C. 7. Evolving On-Board architecture; Figures 1.C.7.1 to 1.C.7.4	What type of interfaces do the DDU, FTP, DVRS, TIU and Destination Signs provide? Do they provide a common interface type, e.g. J1708, IBIS, J1939?	**CLARIFICATION:** See the addition to the RFP provided in the answer to Question 30, following.
Part C, SECTION 2 Level 1 Requirements			
19.	Subsection 2.A. 1.6.3.1. General WLAN Requirements	In the design process, has KCM thought about making one communications module (in charge of communications on the vehicle) for all the units on the vehicle to communicate externally? (Is KCM) Interested in a single gateway?	**CLARIFICATION:** Please see Part C, Subsection 2.A.1.6.3.1 for a description of the general WLAN requirements. These requirements are intended to request a solution including hardware and software that will provide a single gateway to manage wireless data exchanges for all integrated on-board equipment. King County operates an all-Cisco Wide Area Network. As part of the ongoing design review process with ERG, the RFCS contractor, KCM is evaluating Cisco's 1300 Wireless Bridge as well as the 3200 Mobile Access Router as the on-board device. A separate on-board Ethernet hub may or may not be required, depending on which of these devices is selected. The features and functionality provided by the 3200 appear to offer the most flexibility and control of the on-board environment as well as wireless communications between that environment and the KC-WAN. We will provide an update on this decision as soon as possible.
20.	Subsection 2.B, RV4-Update Vehicle Data	Is this WLAN also supposed to support the fare collection functions, hot lists, etc.?	**CLARIFICATION:** The WLAN is a shared infrastructure that will be used to exchange a variety of data from between the vehicle and the transit base including digital video, fare collection transaction and configuration data, and OBS-related data. The WLAN itself is a communications device and does not keep track of uploaded and downloaded data. The RFCS data acquisition computer (DAC) will maintain a configuration table to keep track of data provided to the Fare Transaction Processor and Driver Display Unit. The OBS Server should keep track of data loaded to the VLU and attached subsystems. (Also, see answer to Question 22 below.)
21.	Subsection 2.B, RV4-Update Vehicle Data	Will the data schema (for the fare collection functions, hot lists, etc.) be made available from ERG?	**CLARIFICATION:** No schema will be necessary for the OBS/CCS contractor if the Base Server or VLU is not staging/tracking/ controlling the file transfer. Since the data for the fare collection functions will be uploaded by the RFCS DAC to the FTP via the WLAN, the schema will not be made available. (Also, see answer to Question 22 following.)
22.	Subsection 2.B, RV4-Update	Must the provided system (OBS) do the	**CLARIFICATION:** The OBS Server should keep track of data loaded to each

	Vehicle Data	housekeeping to keep track of data provided to vehicles?	OBS subsystem attached to the VLU. **ADD:** to Subsection 5.1.1.(4) 4) Fare Transaction Processor's (FTP) data (global): **the RFCS DAC will maintain a configuration table to keep track of the data it provides to the FTP and DDU.** a) "Hot List" of lost and stolen ("blocked") cards (updated daily) b) Fare Tables (updated as needed) c) Revalue Events, e.g. for those revalues that have occurred in a card-not-present environment **d) RFCS DDU configuration data** **ADD:** new item to end of list in Subsection 5.1.1. 5) Employee ID data for Operator login validation. Operations and Maintenance personnel . . . **6) OBS DDU configuration data.**
23.		Does KCM expect to have a continuous wireless connection?	**CLARIFICATION:** The RFP defines KCM's requirements for continuous wireless communications using the existing 450 MHz radio system during Level 1, and the future Transit Radio System, which will be provided under a separate contract, to support Level 2 functionality. There are no plans to expand the capabilities of ether of these private radio systems to include wide-band communications for functions such as live video. The WLAN functionality is primarily intended to support data exchanges at the bases between the revenue vehicles and the Base Server.
24.		KCM writes that the Transit Police should be able to use video surveillance real time. Do you want them to have the ability to monitor video camera surveillance over a wider area (than they currently have)?	**CLARIFICATION:** KCM's current video system provides line of sight viewing. Selected KCM police cars are equipped with laptops that include a wireless access point. When one of these cars is within range of a coach equipped with security cameras, the officers can use the laptop to connect wirelessly to the DVRS and view bus video data in real time. This helps them monitor developing security situations and make better decisions about when and how to approach the bus. There are no plans to pursue live video coverage over a wider area. That being said, if there is a low-cost or no-cost way to provide wideband coverage over a larger area, we might be interested in taking a look at it. However, we are not budgeted to implement this and do not expect to make it a priority any time soon.
25.		KCM talks about having wireless communications both in service and at the Bases; have you figured out how to manage wireless activity from the vehicle? Do proposers	**CLARIFICATION** The current video system supports live video monitoring within line-of-sight of a DVRS-equipped vehicle. The system is set up so that the WAP in the police car assigns a temporary, dynamic IP address to the network card in the DVR for the duration of the session. The network card receives a different IP address when it returns to the transit base and associates with the fixed network. When DVRS-equipped vehicles return to the base, they

		have to figure this question out (how it can work) or has KCM already done this?	associate with a WAP and automatically download any incident files that have been captured during the day. Looking ahead, we know that we will have multiple systems that will be required to offload the day's data from the vehicle. We will be looking to you to optimize the offload and manage the priorities of the data offload. We are in a preliminary design review process with ERG to enhance the current system to serve RFCS as well as DVRS data. The selected OBS/CCS contractor will be expected to expand on the infrastructure to meet the requirements of the additional wireless traffic.
26.		Is the WLAN design primarily to be used at the Base?	**CLARIFICATION:** Yes, the WLAN is primarily designed for connectivity at the transit bases. One current exception for the wireless access is our DVRS described above. Also, a possible consideration will relate to the Priced Option described in Part C, Subsection 2.A.4.1.2. Wireless TSP, how to use 802.11 for a Transit Signal Priority wireless solution – connecting buses to signal equipment at TSP intersections – if feasible and cost effective.
27.		I think what we're asking is how those things integrate on the bus and you're saying they're not going to integrate, there are going to be separate systems: there's going to be a police system (DVRS) and there's going to be a (transit base) station system	**CLARIFICATION:** Please reference the VLU functionality and diagrams. Our preference is to use one wireless LAN connection to upload and download all data to and from the revenue vehicle fleet. Your proposal should address the question of how we can integrate the three systems (DVRS, RFCS and OBS), allowing for the required functionality. We are willing to consider leaving the existing dedicated network cards in the DVRS if that is the best solution, and integrating the RFCS and OBS with a separate WLAN solution. However with both of these solutions, we intend to use the same fixed WLAN infrastructure.
28.		So the answer was that basically for this purpose for this RFP is supposed to support base operations.	**CLARIFICATION:** Yes.
29.		On the wireless side, will the WLAN computer need to communicate with the ERG clearinghouse? And if yes, will KCM make those interfaces available?	Note: this answer is different than the verbal answer given during the Pre-proposal Conference on June 30, 2004. **CLARIFICATION:** No. All data will be moved wirelessly on and off the revenue vehicle to the WLAN but the RFCS data will be collected by an RFCS Data Acquisition Computer, which will forward the data to the ERG clearinghouse. The design of these interfaces is currently in progress with ERG and more information will be provided as soon as it is available. KCM is working with ERG and King County's ITS network group to define authentication, security and network configuration requirements.

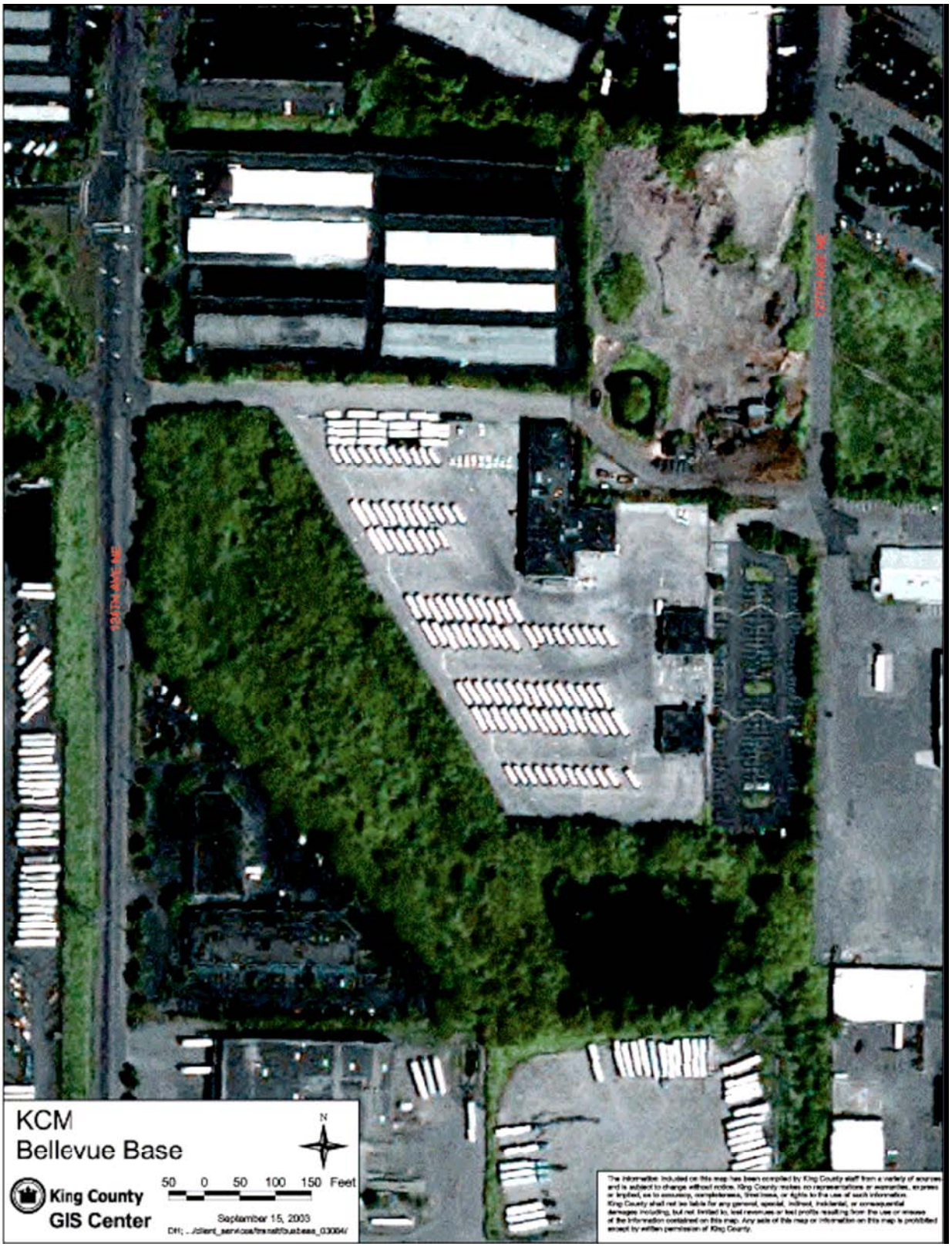
30.	Subsection 2.A. 1.6.4. Vehicle Area Network (VAN)	What interfaces are available for each of the following? (Destination signs, Engine Control, Farebox, Digital Video, Fare Transaction, DDU)	**ADD:** new subsection Subsection 2.A.1.6.4.3. KCM Equipment Communications Ports (See Attachment Two below for new table, which comprises the contents of Subsection A.1.6.4.3.)
31.	Subsection 2.A. 4.1. Priced Options		**DELETE:** portion of last sentence Each of the following options shall be addressed by the proposal both as requested here and in Part A, Attachment ~~3, Price Schedule~~. **REPLACE WITH:** Each of the following options shall be addressed by the proposal both as requested here and in Part A, Attachment **B, Price Proposal Worksheets**.
Part C, SECTION 3 Level 2 Requirements			
32.	Subsection 3.A. 6.6.1. Level 2, 700 MHz Transit Radio System	How to include a detailed interface description to the new 700MHz Transit Radio System in the proposal, when the TRS is still in the RFP phase?	**DELETE:** portion of third paragraph of subsection ~~Proposals~~ shall include a detailed technical description of the functional, electrical, and physical interfaces required on OBS and CCS equipment necessary to complete a fully functional and compliant interface to the Transit Radio System. This description shall comply with the OSI Reference Model established by the International Organization for Standardization (Ref. Doc. Number ISO/IEC 10731:1994). **REPLACE WITH:** **The system design** shall include a detailed technical description of the functional, electrical, and physical interfaces required on OBS and CCS equipment necessary to complete a fully functional and compliant interface to the Transit Radio System. This description shall comply with the OSI Reference Model established by the International Organization for Standardization (Ref. Doc. Number ISO/IEC 10731:1994)
33.	Subsection 3.C. 6.6.1. Level 2 700 MHz Transit Radio System	How to include a detailed interface description to the new 700MHz Transit Radio System in the proposal, when the TRS is still in the RFP phase?	**ADD:** add to end of second paragraph Provide detailed technical descriptions of the proposed functional, electrical, and physical interfaces between the OBS, CCS, and TRS. **If insufficient information regarding the TRS design prevents the proposal of specific interfaces, describe the likely options under consideration and their relative advantages and disadvantages. What additional information will be needed to identify the proposed interfaces?**
Part C, Appendix B Transit Bases Information			
34.	Title Page		**DELETE:** number of pages 1 of ~~17~~ **ADD:** 1 of **21**

35.	Page 2, item 2. Central Campus		**ADD:** additional bulleted item to end of list • Ryerson Base Site Plan
36.	Page 2, item 5. South Base and South Training Facility		**DELETE:** portion of last bulleted item in list • South Base and South Training Facility Site Plans~~.~~
37.			**ADD:** new Page 13 containing aerial photograph of Bellevue base. (See Attachment One for new aerial photograph of Bellevue base.)
Part C, Appendix D Security Camera Interface [now DVRS Interface]			
38.	Appendix title		**DELETE:** portion of appendix title Appendix D ~~Security Camera Interface~~ **REPLACE WITH:** Appendix D **DVRS Interface**
39.	Page 5		**ADD:** a new section to the end of the Appendix <u>DVS-3: Modifications</u> A second model of DVRS equipment, the DVS-3, is being added on-board some of KCM's revenue vehicles. This newer model does not replace the existing DVS-2 equipment installations. From the OBS point of view, the DVS-3 model's primary difference from the DVS-2 is that the DVS-3 has one additional 10/100 Ethernet port. This makes a total of two Ethernet Ports available for high-speed network communication.
Part C, Sections 1, 2 and 3			
40.	All pages		**ADD:** portion of header to all pages in Part C, Sections 1, 2 and 3. **OBS/**CCS RFP #04-001PR
GENERAL PROJECT QUESTIONS			
41.		What is KCM's budget for this project?	**CLARIFICATION:** The County is not prepared to release the budget at this time. We want your Proposal to be driven by the functions identified in Part C and not driven by our projected budget numbers.

GENERAL SYSTEM QUESTIONS			
42.		There is some confusion about the MyBus Internet application and the passenger's ability to get vehicle location information through the Internet?	**CLARIFICATION:** The legacy CAD/AVL system provides current AVL data to the MyBus and BusView Internet applications. See Part C, Section 1.B.5.3.4. AVL Systems Integration, for more details and links to the applications. The provided CCS will continue to supply AVL data to MyBus and BusView as described in Part C, Section 3.A.3.1.1. Continuity in Existing Level of System Functionality.
43.		Taking the DDU as an example, who has ultimate responsibility for making the interface work? Proposers need an understanding of what that thing is today.	**CLARIFICATION:** The OBS/CCS Contractor has the ultimate responsibility for making the interfaces work. However, they will not have sole responsibility. KCM has and will continue to facilitate the sharing of information and data necessary to develop the required interfaces. The specific interface development process will vary depending on the subsystem. In regards to the equipment that will be provided by the RFCS project, ERG has a contractual obligation to provide the software tools and equipment for developing new DDU screens. The OBS/CCS Contractor will be required to have all DDU software and modifications certified by ERG prior to deployment. More detailed information on the DDU and other ERG equipment will be provided soon in an addenda.
44.		When will documen-tation on the DDU & the FTP be available, inclu-deing but not limited to: Interface specifics (Electrical, communications, protocol) API interface for 3rd party use of DDU Capacity of DDU for screens, etc API interface for migrating application functions of FTP How the FTP uses the DDU	**CLARIFICATION:** The Regional Fare Coordination Project (RFCS) is currently engaged in the DDU and FTP hardware Final Design Review process. ERG has delivered the first set of preliminary design documents, including final design documents for the customized equipment. Additional information regarding the RFCS equipment and systems will be provided as soon as it is approved for release.

- **ADD:** adds language to the RFP.
- **CLARIFICATION:** provides a point of information that does not materially effect the RFP
- **DELETE:** deletes the language or item indicated.
- **REPLACE WITH:** replaces the language or item that is indicated for deletion immediately above.

ATTACHMENT ONE: Aerial photograph of Bellevue base for insertion as new Page 13 of Appendix B. See Question 37 above.



ATTACHMENT TWO: Table for insertion which comprises new Part C, Subsection 2.A.1.6.4.3. KCM Equipment Communications Ports. See Question 30 above.

Table 2.A.1.6.4.3. KCM Equipment Communications Ports

		Communications Ports				
KCM Subsystem	**# Ports**	**Ethernet**	**RS485**	**RS232**	**J1708**	**J1939**
AVI Tag (TSP)*	1			RS232 TTL		
DDU	To be provided in future addenda					
Dest. Signs: -Twin Visions -Luminator	 1 2		 1		 1 1	
DVRS	3	2 (avail) 10/100 Base-T	1 (in use)			
ECM	2			1-diagnostics	1-J1708 or J1939	
FTP	To be provided in future addenda					
WDOLS -Cisco	To be provided in future addenda					